

WHAT IS CLAIMED IS:

1. An image display comprising:

a display panel including a plurality of pixels arranged in a matrix pattern, a plurality of first electrodes individually formed corresponding to the pixels, a second electrode formed in common with the first electrodes, a plurality of light emitting elements provided between the first electrode and the second electrode and including a light emitting layer, and a plurality of transistors provided corresponding to the pixels and connected between the first electrodes and a power supply voltage line for controlling the current supply to the EL elements;

a scan driver for sequentially selecting respective pixel lines;

a data driver for applying an RGB display signal corresponding to a pixel line of the display panel each time the pixel line is selected; and

a display controller for using a current value fed back by the second electrode of the display panel and externally input RGB data to correct a white gray level of the RGB data and generate RGB display data, and for providing the generated RGB display data to the data driver, wherein the display controller determines an amount of emitted light on the corresponding screen according to the fed back current to generate a brightness control reference signal corresponding to the amount of emitted light, and controls the white gray level of the RGB data according to the brightness control reference signal to control the brightness of the display panel.

2. The image display of claim 1, wherein the display controller comprises:

a current voltage converter for outputting a voltage having a level corresponding to the current fed back from the second electrode of the display panel;

an operation controller for detecting the total amount of the emitted light according to the intensity of the voltage input by the current voltage converter, generating a brightness control reference signal corresponding to the amount of the emitted light, and outputting the brightness control reference signal;

5 a data voltage ratio controller for amplifying the brightness control reference signal input by the operation controller to generate a white gray level control signal for each color of RGB, and output the signal; and

 a voltage amplifier for amplifying the RGB data, receiving the white gray level control signal, controlling a driving voltage of an amplifier, and controlling a fluctuation height of the
10 white gray level of the RGB data to generate and output RGB display data.

3. The image display of claim 1, wherein the current fed back by the display panel is a summation of currents flowing to the second electrode from the first electrodes of the respective pixels.

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4. The image display of claim 2, wherein the operation controller generates a brightness control reference signal for controlling the brightness to reduce the fluctuation height of the white gray level of the RGB data when the amount of the emitted light on the screen is greater than a predetermined reference value, and generates a brightness control reference signal
20 for controlling the brightness to increase the fluctuation height of the white gray level of the RGB data when the amount of the emitted light on the screen is less than the predetermined reference value.

5. The image display of claim 2, wherein the data voltage ratio controller includes three operational amplifiers for respectively processing the brightness control reference signal of the RGB data.

6. The image display of claim 2, wherein the data voltage amplifier includes three operational amplifiers for processing the RGB data by respectively receiving RGB data and a corresponding brightness control reference signal to control the fluctuation height of the white gray level of the RGB data and generating RGB display signals.

7. An image display comprising:
a display panel including a plurality of pixels arranged in a matrix pattern, a plurality of first electrodes individually formed corresponding to the pixels, a plurality of second electrodes commonly formed for a plurality of groups defined by defining the first electrodes as the groups, a plurality of light emitting elements provided between the first electrode and the second electrode and including a light emitting layer, and a plurality of transistors provided corresponding to the pixels and connected between the first electrodes and a power supply voltage line for controlling the current supply to the EL elements;
a scan driver for sequentially selecting respective pixel lines;
a data driver for applying an RGB display signal corresponding to a pixel line of the display panel each time the pixel line is selected; and
a display controller for using a current value fed back by at least one second electrode of the display panel and externally input RGB data to correct a white gray level of the RGB data

and to generate RGB display data, and for providing the generated RGB display data to the data driver, wherein

the display controller determines an amount of emitted light on the corresponding screen according to the fed back current to generate a brightness control reference signal corresponding to the amount of emitted light, and controls the white gray level of the RGB data according to the brightness control reference signal to control the brightness of the display panel.

8. A method for driving an image display, comprising:

sequentially selecting respective pixel lines;

applying an RGB display signal corresponding to a pixel line of the display panel each time the pixel line is selected; and

using a current value fed back by the second electrode of the display panel and externally input RGB data to correct a white gray level of the RGB data and generate RGB display data, and to provide the generated RGB display data to a data driver.